

Section 4

Permit Recommendations

4.1 Introduction

Using the principles described in Section 1.1, the permittees have reviewed the existing permit requirements and stormwater management program. The result of this review has been the development of recommendations for incorporation into the MS4 Permit or MSWMP. As part of this review, the permittees have also reviewed the existing permit text and made recommendations for changes in permit language. The following section summarizes the key changes recommended for the area-wide MS4 Permit and management program during the fourth permit term.

4.2. New Findings

Specific recommendations for changes to the Findings contained in the existing permit are provided in Appendix C. In addition, it is recommended that the next permit also include the following Findings:

- Flooding caused by urban runoff poses a considerable threat to public safety and risks significant property damage. It is essential that the permittees build and maintain adequate flood control facilities to minimize these dangers by collecting and transporting stormwater safely downstream. This is the primary purpose for which the conveyance system was constructed
- Considerable sampling data have been collected to characterize ambient receiving water quality in the Santa Ana River watershed. Analysis of these data indicates there is no reasonable potential to exceed water quality objectives for the vast majority of pollutants. Therefore, it is appropriate to focus limited program resources on those pollutants which pose the greatest risk to human health and/or the environment.
- The public education program developed and implemented by the permittees has established a general understanding of the need to control stormwater pollution. Some initiatives, such as the hazardous waste disposal program, have been particularly successful and should be continued. The public education program should be periodically reviewed and revised to ensure that future campaigns focus on reducing the most significant threats to human health and the environment.
- The permittees have joined with peers in Riverside County and Orange County to establish the SQSTF. The purpose of the Task Force is to review water quality standards related to recreational uses in the Santa Ana River watershed and recommend revisions to designated beneficial uses and/or site-specific water quality objectives where appropriate. If successful, it is likely that the Task Force recommendations may form the basis for amending the Santa Ana River Watershed Basin Plan. This, in turn, may necessitate modifying the previously approved

pathogen TMDL and reopening the MS4 Permit to revise related terms and conditions.

- Previous studies have identified Combined Animal Feedlot Operations (CAFOs) as a significant source of bacterial contamination in stormwater runoff. The RWQCB has elected to issue separate discharge permits directly to these CAFOs. Accordingly, the permittees have no direct responsibility for regulating or inspecting waste discharges from the CAFOs.
- Increasing population growth and finite potable water supplies have increased the importance of Integrated Resource Planning. Harvesting stormwater for recharge and future use is an appropriate management strategy and the permittees should collaborate with water supply and wastewater agencies in the region to ensure the most efficient use of this resource.

4.3. Permit Definitions

Several regulatory terms are routinely used to describe specific obligations the permittees have when implementing the MS4 program. The fundamental importance of these phrases necessitates that they be defined with greater clarity and precision. Therefore, the following new or revised definitions are recommended for inclusion in the next MS4 Permit:

- **MEP (Maximum Extent Practicable)** – MEP is an acronym for "Maximum Extent Practicable" and refers to the standard for implementation of stormwater management programs. Section 402(p)(3)(B)(iii) of the Clean Water Act requires that municipal stormwater permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." In practice, compliance with the MEP standard is evaluated by how well the permittee implements the "minimum measures" identified by EPA, including: (1) Public education and outreach on stormwater impacts; (2) Public involvement/participation; (3) Illicit discharge detection and elimination; (4) Construction site stormwater runoff control; (5) Post-construction stormwater management in new development and redevelopment; and (6) Pollution prevention/good housekeeping for municipal operations. Collectively, these minimum measures are often referred to as "Best Management Practices" or BMPs. The MEP standard does not require permittees to reduce pollutant concentrations below natural background levels, nor does it necessarily require further reductions where pollutant concentrations in the receiving water already meet water quality objectives. In implementing the MEP standard, it is appropriate for permittees to prioritize their resource allocation to address the stormwater pollution problems that pose the greatest and most immediate threat to human health or the environment.

- ***Controllable Water Quality Factors*** – Section 13241 of the Porter-Cologne Act requires Regional Water Quality Control Boards to take into consideration: "water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area" when establishing water quality objectives. Permittees are not responsible for meeting water quality objectives if the factors causing exceedances are beyond their ability to control through practical measures.
- ***Significant Environmental Impact*** - Significant environmental impact may be demonstrated directly through actual evidence of harm (e.g. fish kills, illness outbreaks) or indirectly by analyzing samples of the receiving water. By definition, when pollutant concentrations exceed applicable water quality objectives defined in the Santa Ana River Watershed Basin Plan or other official state and federal regulations, then there is potential for significant adverse effect on the environment. Conversely, when pollutant concentrations meet applicable water quality objectives, then there is rarely any risk of significant environmental impact even when the chemical concentrations are elevated above natural background conditions.
- ***Significant Non-compliance*** - Discharging any waste that causes or contributes to an exceedance of water quality objectives specified in the Santa Ana Regional Water Quality Control Plan or that poses an imminent and substantial threat to human health or the environment is deemed to constitute significant non-compliance with the federal Clean Water Act, the state Porter-Cologne Act, this permit and various local ordinances. Failure to obtain coverage under one or more of the Statewide General Permit(s) by filing an appropriate Notice-of-Intent (NOI) is also deemed to be significant non-compliance with the aforementioned laws and regulations. Failure to correct deficiencies identified during formal stormwater inspections, after receiving proper notice and within the allotted compliance schedule, is also deemed to be significant non-compliance.
- ***Significant Source of Pollutants*** - A "significant source" is one that emits a sufficient quantity of pollutants, alone or in combination with other dischargers, and that there is a reasonable potential to cause or contribute to an exceedance of water quality objectives in the stormwater channel or the downstream receiving waters.

4.4 Permit Terms and Conditions

The permittees reviewed the existing MS4 Permit language and have developed recommended changes to reflect the current status of the stormwater management program and to incorporate language consistent with the principles described in Section 1.1. Key recommendations for new or revised permit language include (see Appendix C for recommended permit language text revisions):

- Text revised, where necessary, to indicate that permittees are required to implement BMPs designed to reduce pollutant concentrations to the maximum extent practicable. The MEP qualifier was inadvertently omitted in several critical paragraphs throughout the previous permit.
- Text revised to include wildlife as among the bacteria sources that cannot be reasonably controlled by the permittees.
- Public education requirements revised to provide greater flexibility in allocating program resources to ensure meaningful improvements in stormwater quality.
- Text revised to indicate that the MS4 Permit issued to county or municipal permittees includes all relevant departments within the county or municipality.
- Revised and consolidated inspection requirements; added flexibility to schedule the frequency and timing of inspections using a risk-based scoring system to prioritize industrial facilities and construction sites.
- Revised and consolidated notification requirements for spills to simplify the permit.
- Revised and consolidated training requirements for inspectors to simplify the permit.
- Revised text to indicate primary responsibility for enforcing the statewide general permits rests with the Regional Water Quality Control Board.
- Removed dated, completed tasks/requirements.

4.5. Water Quality Monitoring Program

The RWQCB has adopted a TMDL for indicator bacteria in the middle reaches of the Santa Ana River. The TMDL requires permittees to develop and submit an Urban Source Evaluation Plan (USEP) as an essential first step in reducing pathogens in stormwater. It is appropriate for the permittees to reallocate program resources to ensure the USEP is completed successfully and expeditiously. Some of the previous monitoring programs, designed to characterize general stormwater quality, may be de-emphasized in favor of more targeted water quality monitoring intended to identify and correct specific pollutant problems.

4.6 Reporting Requirements

Reporting obligations in previous MS4 Permits focused on documenting the development of required program elements. Now that those elements are in place, future reporting requirements should place more emphasis on pollutant investigations and water quality accomplishments rather than merely summarizing program initiatives or process changes. As with the Inspection Program and the Water Quality Monitoring Program, the Reporting Program should be Risk-based,

Outcome-Oriented and Compliance-focused. Therefore, the permittees propose to reduce or eliminate reports that do not serve an essential purpose in improving stormwater quality. Implementation of this recommendation has been incorporated into the Program Evaluation section of the MSWMP.

4.7 Pollutant of Concern Evaluations & Special Studies

In addition to the USEP described above, it may be appropriate to conduct evaluations of each pollutant of concern identified in Section 3 to identify an appropriate course of action. This evaluation may result in recommendations to undertake additional special studies in the next permit term. In particular, previous water quality monitoring data have revealed elevated zinc, lead and copper concentrations in stormwater runoff. Recent EPA guidance indicates that copper toxicity can be significantly mitigated by certain water chemistry factors (e.g. alkalinity and dissolved organic carbon) common to effluent-dominated and effluent-dependent streams in the arid west. Studies also suggest that zinc toxicity may also be significantly mitigated by water chemistry factors. Implementation of this recommendation is included in the Monitoring Section of the MSWMP.

4.8 Implementation of Audit Recommendations

All of the permittees underwent formal program audits in 2005 and 2006. Although formal audit reports are still pending, the RWQCB provided the following key recommendations to improve the area-wide stormwater management program:

4.8.1 Local Implementation Plan (LIP) Development

The RWQCB recommends that each Co-Permittee develop a LIP that describes how the stormwater management program is administered within each Co-Permittee's jurisdiction. Examples of the types of information that would be included in a LIP include: (1) roles and responsibilities of city departments for implementing program elements; (2) process for the review and approval of program-related activities, for example, CEQA analysis and WQMP development; and (3) tools used to support program elements, for example checklists or handouts. This recommendation is discussed further in Section 5.3.4 and incorporated into the MSWMP as a performance commitment during the next permit term.

4.8.2 Legal Authority and Enforcement

The RWQCB recommends that the permittees re-visit the adequacy of their legal authority to implement the stormwater program and review the existing enforcement response document. Particular areas to consider for improvement include establishment of more substantial fines and authority to issue stop work orders at construction sites for non-compliance. The RWQCB also recommends that the cities establish bonding requirements for construction sites as a compliance tool. These recommendations have been incorporated into the MSWMP as performance commitments during the next permit term.

4.8.3 Illicit Connection/Illicit Discharge (IC/ID) Program

The RWQCB indicated that the permittees should be more pro-active with the implementation of the IC/ID program. Specifically, the program should not be only complaint driven, but instead use all opportunities to look for evidence of dry weather flows, for example, during storm drain inspection/cleaning activities or during other inspection-related activities. This recommendation does not require any changes to the MSWMP; existing performance commitments address this need.

4.8.4 New Development Requirements

The RWQCB recommends that the permittees further develop minimum erosion and sediment control BMP requirements for inclusion in Stormwater Pollution Prevention Plans (SWPPPs) and “marry” local erosion and sediment control plans with SWPPP erosion and sediment control requirements so that the approved BMPs address all construction phases. In addition, the RWQCB recommended that the permittees review and revise the WQMP to address a number of issues, for example, development of a WQMP review checklist, final project close-out procedures, and incorporation of planners into the WQMP process. These recommendations have been incorporated into the MSWMP as performance commitments during the next permit term. In addition, during the first year of the permit term, the permittees propose to review and, where appropriate, revise Tables 2-1 and 2-5 of the WQMP.

4.8.5 Training/Recordkeeping

The RWQCB recommends that the permittees conduct better program recordkeeping, especially with regards to training activities. This recommendation does not require any changes to the MSWMP; existing performance commitments address this need (for example through the continued implementation of the MS4 Solution).

4.9 Integrating 404/401 Certification Requirements into the MSWMP and WQMP

Currently, 401 certification review of a WQMP for a proposed project is not always coordinated well with the WQMP approval process. As a result, RWQCB staff has at times made a finding that the permittee-approved BMPs in the WQMP do not meet 401 certification requirements after a project has been approved and is already under construction. This disconnect between the WQMP approval and 401 certification processes needs to be addressed during the development of the next MS4 Permit. To facilitate this need, it is recommended that the following principles be incorporated into the process:

- Permittees should coordinate with RWQCB 401 certification staff sufficiently early in the WQMP development and approval process so that any 401 certification concerns can be addressed prior to the project receiving authorization or approval by the permittee.

- The 401 certification review only applies to the connection between the constructed project and the receiving water that is under jurisdiction of the Clean Water Act; it does not apply to the entire project.

4.10 Other Recommended Permit Changes

This section highlights other miscellaneous recommended changes to the Stormwater Management Program:

- Use of structural infiltration treatment BMPs for industrial sites – The 2002 MS4 Permit contained language restricting the use of these types of BMPs in industrial facilities. However, because what can be defined as an “industrial site” varies substantially, additional flexibility is needed with regards to the use of these BMPs at industrial sites. To address this need, the MSWMP has been revised to allow for the use of these BMPs, but only under specific conditions.